

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 POLLUTION/SITUATION REPORT  
 C & H Power Plant - Removal Polrep  
 Initial Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region V**

**Subject:** POLREP #1  
 Pollution Report (Initial) #1  
 C & H Power Plant

Lake Linden, MI  
 Latitude: 47.1940924 Longitude: -88.4073392

**To:**

**From:** Ralph Dollhopf, OSC

**Date:** 11/1/2011

**Reporting Period:** 0800 Hrs 10/24/2011 to 1700 10/27/2011

**1. Introduction**

**1.1 Background**

<b>Site Number:</b>	B5WF	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>		<b>Response Type:</b>	PRP Oversight
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	Site wide
<b>Mobilization Date:</b>	10/24/2011	<b>Start Date:</b>	10/24/2011
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	Pending	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	MDEQ Notified
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

**1.1.1 Incident Category**

CERCLA Incident Category: Inactive Production Facility

**1.1.2 Site Description**

The Site encompasses approximately 14 acres and contains one dilapidated building; the former C&H Power Plant building (the Power Plant). The Site historically contained several primary buildings including the power plant, a centrally located boiler house, and the "Hecla" Stamp Mill along the water front. Smaller buildings located north of the power plant and boiler house included a "Filter House" and a "Still House." The Site currently contains foundations and floors from these buildings which no longer exist, although remnants of some of the buildings remain. The Site also contains former rock bins and bermed rubble and debris piles.

The Power Plant was established in 1905 to meet the electrical demands of the evolving industrial complex and mining operations. The Power Plant was one of two electrical generating stations that operated in parallel and supplied electricity throughout the region. By 1931, the Power Plant was

connected to the electrical grid through transformers and eight outgoing feeders that exited the west side of the building overhead.

The topography of the Site is relatively flat, with building foundations and debris scattered at various locations. The eastern Site boundary has a steep sloping grade towards Torch Lake, which is approximately twenty feet lower than the ground surface of the center of the Site, and below the elevation of the basement floor of the Plant. Groundwater flow in the Site area is unknown, however, based on the proximity of the Site to Torch Lake, EPA presumes that the groundwater flows east toward Torch Lake.

#### **1.1.2.1 Location**

The Site is located on Highway M-26 south of the Village of Lake Linden, in Houghton County, Michigan. The geographical coordinates for the Site are latitude 47.1850924 North and longitude, -88 4133392 West. The Site is bounded to the east by Torch Lake, to the north by the Houghton County Historical Museum, a public park, and a marina, to the south by residential properties, and to the west by Highway M-26.

The Site is composed of a distinct parcel of property which was surveyed in 2002. EPA has adopted the legal description of the Property contained in the 2002 survey to establish the boundaries of the Site.

#### **1.1.2.2 Description of Threat**

Widespread bulk Asbestos Containing Material (ACM) contamination has been detected throughout the Site and inside the Power Plant. Asbestos fibers have also been detected in surface soil and air samples. Contaminated soils contain concentrations of arsenic, antimony, copper, iron, and lead that are greater than Michigan Department of Environmental Quality (MDEQ) Part 201 Residential Direct Contact Criteria (RDCC). Polychlorinated Biphenyls (PCBs) have also been detected in the water in the basement of the Power Plant.

#### **1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

At the request of the MDEQ, the EPA performed a three-phase site assessment (SA) beginning on April 15, 2010. The SA was composed of the following activities:

- A visual assessment of Site features, and exposed debris and materials;
- An asbestos survey consisting of collecting bulk samples, soil samples, and performing activity-based sampling of air;
- X-ray fluorescence analyzer soil screening for metals,
- A gamma radiation survey to screen for radiological contaminants, and,
- Soil and water sample collections for laboratory analysis for potential contaminants of concern (COC).

The SA indicates the presence of uncontrolled hazardous substances at the Site, including: inorganic COCs in surface soils; lead and ACM on the surface soil, interior building foundations and exterior debris piles; and, possible PCB contamination in the water and basement of the Power Plant.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

AMEC initiated activities at the Site on Monday October 24, 2011. Activities included orienting the surveyors, Coleman Engineering Company (Coleman) of Iron Mountain, Michigan with the Site. The surveyors established their base station and initiated work. Coleman was also contracted by AMEC to perform decontamination activities. Coleman initiated establishment of two decontamination pads, one near the marina gate in the southeast portion of the Site and one at the main access point next to the trailer home at the Site.

AMEC/Coleman initiated decontamination activities at the Site on Tuesday October 25, 2011. By the end of the day Coleman had decontaminated approximately 20 unique vehicles and removed them from the

Site AMEC maintained a log of the vehicles including photographic documentation, VIN Numbers, Make, Model, and other pertinent information. Surveying activities continued, including the demarcation of property corners. Reportedly, the adjacent property owners to the north, the Houghton County Historical Museum, disputed the location of the property boundary. AMEC will adjust the location of the fencing to ensure that its location is inside the staked property boundaries. AMEC also conducted baseline air sampling using five air sampling units established in the corners of the property and one centrally located southeast of the power plant building. Personnel were also wearing personal air monitoring instruments for the collection of air samples.

On Wednesday Coleman completed decontamination of the equipment, vehicles, and other items and removed them from the Site. The other items included but were not limited to, a snow plow blade, two wood burning boilers, and similar random pieces of equipment that were being stored on the property. Decontamination water and sediment were collected in the decontamination pad and transferred to Michigan Department of Transportation 55 gallon drums. The drums were stored inside larger overpack drums in the event that a "hard" frost/freeze was experienced. Surveying activities continued. With the property boundaries staked, START and AMEC reviewed the location of fencing and gates with AMEC's fencing contractor Marquette Fence Company. As you may recall there is a concrete channel that borders the Site on the west. Although the channel is located on the property (based on the survey results), the fencing will be located on the east side of the channel, between the channel and the building/berm. The choice to place the fencing on the east side of the channel was related to the proximity of Highway M26. The fencing, if on the west side of the channel would be close to the highway, between approximately 6 and 10 feet. It's anticipated that the fencing would be damaged that close to the road during the winter due to snow plowing and snow accumulations.

On Thursday October 27, 2011, Coleman temporarily decommissioned the decontamination pads, cleaning them and rolling them up for storage. Coleman sampled the containers for disposal characteristics and plans to utilize UP Environmental Services of Bark River, Michigan for waste transportation and disposal services. Surveying activities continued, collecting Site features and establishing the grid for the upcoming asbestos assessment and pick-up. Surveying was completed and all personnel demobilized from the Site.

### 2.1.2 Response Actions to Date

The performance of the activities summarized above marks the initiation of response activities by the PRP. The proposed work by the PRP includes establishing Site controls to limit access and performance of initial assessment work.

### 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

A PRP has been identified for the Site. An Administrative Order on Consent (AOC) has been drafted, and entrance into the AOC by the PRP is pending.

### 2.1.4 Progress Metrics

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>
Decontamination Waste	Liquid	5 Drums		Filtration	
Decontamination Waste	Solid	1/2 Drum		None	
Decontamination Waste	PPE	1 Drum		None	

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

The following is a summary of the PRP's scheduled field activities for the coming weeks.

- Fence Installation: 11/2/11 - 11/25/11
- Asbestos Assessment: 11/7/11 - 11/11/11

Asbestos Abatement (Exterior - Visual): 11/7/11 - 11/18/11  
 Basement Water Sampling: 11/14/11 - 11/18/11

#### **2.2.1.1 Planned Response Activities**

##### **FENCE INSTALLATION**

After the property boundary has been marked, security fencing will be installed. The Marquette Fence Company has been contracted to install the fence. All fence installation personnel will be 40 hour HAZWOPER trained. A clean support zone will be constructed in the northeast corner of the site. The support zone will be used as the staging area for materials and equipment along with a decontamination area for equipment and personnel. If necessary, the City Marina parking area near the northeast corner of the site will also be used to stage equipment and supplies.

The fence will consist of a six-foot high galvanized chain link fence. It is anticipated that approximately 2,500 linear feet of property boundary will be fenced. The northern, southern and western Site borders will be fenced along the property boundary. The fence along the north and south borders will extend over the water approximately ten feet to prevent access. No fence will run along the eastern border with Torch Lake. Four gates will be installed, one on the southern fence section, two on the western fence section, and one on the northern fence section. The gates will be 16-foot access gates, composed of two 8-foot gates used in combination. Where berms or other obstructions exist, the fence location may be adjusted to minimize the disturbance of the Site soils.

It is anticipated that a minimal amount of surface leveling will be required in localized areas. During activities that disturb Site soils, thorough wetting of the soil will be performed before and during the activities. The fence posts will be installed using direct push methods. Therefore, limited disturbance of the soil will occur and no soil cuttings will be generated.

##### **SURFACE ASBESTOS SURVEY**

AMEC will conduct a visual asbestos survey to document and define the presence of ACM and suspect ACM on the ground surface. The location and apparent visual occurrence of ACM and suspect ACM will be documented for each grid cell using "high", "medium" and "low" to describe conditions. Grid cells will also be photo-documented to memorialize conditions. The future activity based sampling program for asbestos in site soils will be designed based on this survey and conducted following the surface asbestos removal.

#### **2.2.1.2 Next Steps**

Fencing installation is scheduled to begin on November 2, 2011. No work is scheduled to be conducted at the Site between October 31, 2011 and November 1, 2011.

Asbestos assessment and pick-up activities are scheduled to begin November 7, 2011.

#### **2.2.2 Issues**

Inclement weather, specifically significant snow accumulation, would potentially delay or postpone the proposed work activities.

#### **2.3 Logistics Section**

Personnel trained and certified in asbestos awareness will be assigned for field oversight when ACM assessment and disposal activities are underway.

#### **2.4 Finance Section**

No information available at this time.

#### **2.5 Other Command Staff**

No information available at this time.

### **3. Participating Entities**

No information available at this time.

#### **4. Personnel On Site**

1 START - Weston Solutions, Inc

#### **5. Definition of Terms**

ACM	Asbestos-containing material
ACWM	Asbestos-containing waste material
C&H	Calumet and Hecla
COC	Chemical of concern
MDEQ	Michigan Department of Environmental Quality
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated biphenyls
RACM	Regulated asbestos-containing material
RDCC	Residential Direct Contact Criteria
SA	Site assessment
START	Superfund Technical Assessment and Response Team
TSI	Thermal system insulation
U S EPA	United States Environmental Protection Agency
XRF	X-ray fluorescence

#### **6. Additional sources of information**

##### **6.1 Internet location of additional information/report**

For additional information refer to "Documents" on [www.epaosc.org](http://www.epaosc.org)

##### **6.2 Reporting Schedule**

The next Polrep will be submitted on 11/04/2011.

#### **7. Situational Reference Materials**

Refer to the attached photographs and map for additional information related to the response activities performed at the Site.